



## Zoonotic & Environmentally Transmitted Diseases (ZED) Steering Committee

### WASO Contacts

Integrated Pest  
Management (IPM)  
202-513-7183 (East)  
970-225-3542 (West)

Public Health  
202-513-7226

Risk Management  
202-513-7224

Wildlife Health  
970-225-3593

### Web Resources

#### IPM Program:

<http://www1.nrintra.nps.gov/ipm/index.cfm>

#### Public Health:

[http://www.nps.gov/public\\_health/intra/](http://www.nps.gov/public_health/intra/)

#### Risk Management:

<http://www.nps.gov/riskmgmt/>

#### Wildlife Health:

<http://inside.nps.gov/programs/program.cfm?prog=304&div=54&page=home>

#### CDC:

<http://www.cdc.gov>

#### State and Local Health Departments:

<http://www.cdc.gov/mmwr/international/relres.html>

### West Nile Virus Policy and Risk Reduction in the National Parks

Management decisions on when and how to evaluate risks from WNV and associated management strategies will be determined on a site-by-site basis, in accordance with NPS Management Policies 2001. This evaluation shall be based on parameters specific to the site which include, but are not limited to: site use, confirmed presence of WNV in birds and/or mosquito populations (scientific testing), presence of competent vectors, mosquito predators, associated monitoring/surveillance data, site ecology, presence of rare or endangered species, weather patterns and temperature. In addition, mosquito management efforts will be initiated only when a clear and defined threat to park resources and/or human health has been determined through a consultation process with experts, and where human health is concerned, when advised to do so by the U.S. Public Health Service (NPS Public Health Program and Centers for Disease Control). Nuisance mosquitoes will not be managed unless specific and exceptional situations arise.

#### ....Wildlife

It is difficult to determine the risk WNV has on wildlife populations unless baseline data is available. Threatened and endangered species or species of concern, such as genetically significant wildlife/stock, should be surveyed early on to achieve a baseline (general health status) and then periodically monitored for presence of WNV. Parks may find useful baseline data through previous wildlife surveys from outside organizations. An example for birds would be the annual Christmas Bird Counts, or others.

#### ....Humans

Risks to humans can be reduced through education of the public and employees in self-protection and avoidance. Efforts towards risk reduction shall be based on identifying and locating high-risk areas/situations, and on surveillance and quantitative monitoring programs.

#### Risk Reduction Through Management Action

Management decisions on how to reduce risk from WNV and associated management strategies to humans, the resource and the environment are site specific. Reducing the risk involves decreasing the chance of a human/animal from contracting the disease and/or reducing the risk of pesticide exposure. Risk reduction should include a variety of short and long term management actions such as: education of staff and visitors, monitoring/surveillance programs, sanitation programs, reduction of non-natural (man-made) habitat, site restoration initiating periodic park or specific site closures, insecticide application, request funding for future surveys; or no action. Note that requests for insecticide applications (adulticide or larvicide) use will be considered after all other pest management tools have been reviewed and it has been determined through the NPS IPM Program (<http://www1.nrintra.nps.gov/ipm>) and technical advisors that the pesticide is a necessary component in order to reduce risk of WNV on the site.

## References

The following **excerpts** from Management Policies 2001 (<http://www.nps.gov/policy/imp/chapter4.htm>) will be helpful when addressing risk in parks. Please read the entire section for clarification:

- Section 4.4.5 Pest Management
- Section 4.4.5.1 Pests "Pests are living organisms that interfere with the purposes or management objective of a specific site within a park, or that jeopardize human health or safety....Native pests shall be allowed to function unimpeded, except as noted below...(such as) ..Manage a public health hazard when advised to do so by the U.S. Public Health Service (which includes NPS Public Health Service and Centers for Disease Control), or to otherwise protect against a threat to human safety."
- Section 4. 4. 5. 2 Integrated Pest Management Program "The Service conducts an Integrated Pest management Program (IPM) to reduce risks to the public, park resources and the environment".
- Section 4. 4. 5. 3: Pesticide Use "The decision to incorporate a chemical, biological, or bio-engineered pesticide into a management strategy is based on a determination by a designated IPM Specialist that it is necessary and that all other available options are either not acceptable or not feasible".

## Education

- Understand the disease ecology and evaluate your risk of contracting it. (CDC WNV Transmission Information - <http://www.cdc.gov/ncidod/dvbid/westnile/qa/transmission.htm>)
- Reduce artificial mosquito breeding habitat around developed areas.
- Understand the biology of natural areas, food chain, affects of natural predators (American Mosquito Control Association - <http://www.mosquito.org/MosqlInfo/mosquito.html>)
- Use of personal repellants (insecticides). (NPS ZED WNV Personal Protection – [http://www.nps.gov/public\\_health/zed/wnv/wnv\\_pp.htm](http://www.nps.gov/public_health/zed/wnv/wnv_pp.htm), and CDC Insect Repellent - [http://www.cdc.gov/ncidod/dvbid/westnile/qa/insect\\_repellent.htm](http://www.cdc.gov/ncidod/dvbid/westnile/qa/insect_repellent.htm))

###